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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,048	07/26/2005	Karl-Heinz Spether	2693-009/NP	3918

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EXAMINER
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TRUONG, THANH K

ART UNIT	PAPER NUMBER
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3721

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/20/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/522,048

Applicant(s)

SPETHER, KARL-HEINZ

Examiner

Thanh K. Truong

Art Unit

3721

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 December 2006.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 7-14, 18 and 20 is/are rejected.  
7) ☒ Claim(s) 15-17 and 19 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12-6-06.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This action is in response to applicant's amendment received on December 6, 2006.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 7-14 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Constable (GB 784,257).

Constable discloses an apparatus comprising:

a receiving part (9);

a pick ring non-rotatably coupled with the receiving part, the pick ring including a plurality of movable segments (13);

an actuation system that adjusts the movable segments to vary an inner diameter of the pick ring (see drawing – only figure), the actuation system including a cone-taper coupling between the receiving part and at least one of the movable segments (page 1, lines 53-59); and

a pick-up system including a spring system (14) acting on at least one of the movable segments (13), the spring system selectively exerting a biasing force on the at least one movable segment in the direction of a central axis of the closing cone (the biasing force located at the central axis and projecting outwardly);

wherein the cone-taper coupling selectively squeezes together the movable segments.

Constable further discloses:

Regarding claims 8 and 14, wherein the spring system is provided with at least one spring ring engaging at least one of the movable segments (it is construed that spring 14 contains at least one spring ring).

Regarding claim 9, wherein the pick-up system includes at least one ball (the ball of the ball bearing – located on near the top of the only drawing) that is selectively subjected to a compliant force.

Regarding claim 10, wherein the actuation system includes a resetting device (8).

Regarding claims 11 and 12, wherein the pick-up ring includes a device for increasing the holding power on an inner surface thereof (the drawing shows teeth like surfaces of members (13) that provide the holding power on the cap), and the apparatus comprising a torque transfer system (the capping device transfers torque from the drive to rotate the cap).

Regarding claim 13, Constable discloses:

a receiving part (9) having an inner surface that defines a generally conical shape;

a pick ring disposed at least partially in the receiving part, the pick ring including a plurality of movable segments (13), each of the movable segments having a surface that defines a conical shape complementary to the inner surface of the receiving part and that establishes a cone-taper coupling between the pick ring and the receiving part (see the only drawing);

an actuation system that at least one of adjusts the movable segments to establish a maximum an inner diameter of the pick ring and limits motion between the pick ring and the receiving part generally along a central axis of the closing cone;

a pick-up system including a spring system (the spring system includes the spring (not number) below the member 16 and the spring identifies as reference number 14) that

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establishes a biasing force on the movable segments of the pick ring toward the central axis of the closing cone, wherein the movable segments of the pick ring are operable to expand against said biasing force of said spring system to accept one of the closures (it is construed that the spring (not number) located below member 16 exerts a biasing force on member 9 which in turn forces on the movable segments of the pick ring toward the central axis of the closing cone); and

the pick ring operable to move relative to the receiving part generally along the central axis of the closing cone to close the cone-taper coupling and squeeze together the movable segments of the pick ring.

Regarding claim 18, wherein at least one of the moveable segments includes a beveled intake portion operable to direct the closure into the pick ring (the drawing shows the moveable segments (13) include beveled intake – the taper portion – operable to open up to receive the closure into the pick ring).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 18 and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Constable (GB 784,257) in view of Sonnenberg (3,984,965).

As discussed above in paragraph 3 of this office action, Constable discloses the claimed invention, but it does not expressly disclose that the moveable segments include a

beveled intake and the inner surface including grooves that are generally parallel to the central axis of the closing cone.

Sonnenberg discloses an apparatus comprising the moveable segments include a beveled intake and the inner surface including grooves that are generally parallel to the central axis of the closing cone (figures 1 & 3). The beveled intake provides a means to accommodate the inserting of closure and the grooves provide a better frictional engagement with the cap.

Therefore, it would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have modified Constable by incorporating the beveled intake and the grooves as taught by Sonnenberg providing a more effective closing cone.

6. Claims 7, 8, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Koebbeman (3,998,032).

Koebbeman discloses an apparatus comprising:

a receiving part having an inner surface that defines a generally conical shape (member 37 is construed as a portion of the receiving part, and it has conical shape – see surface 41 on figures 2 and 3);

a pick ring disposed at least partially in the receiving part, the pick ring including a plurality of movable segments (35), each of the movable segments having a surface (43) that defines a conical shape complementary to the inner surface of the receiving part and that establishes a cone-taper coupling between the pick ring and the receiving part (figures 2-3);

an actuation system that at least one of adjusts the movable segments to establish a maximum an inner diameter of the pick ring and limits motion between the pick ring and the receiving part generally along a central axis of the closing cone;

a pick-up system including a spring system (45 and 51) that establishes a biasing force on the movable segments of the pick ring toward the central axis of the closing cone, wherein the movable segments of the pick ring are operable to expand against said biasing force of said spring system to accept one of the closures (it is construed that the spring 45 exerts a biasing force on member 37 which in turn forces on the movable segments 35 of the pick ring toward the central axis of the closing cone); and

the pick ring operable to move relative to the receiving part generally along the central axis of the closing cone to close the cone-taper coupling and squeeze together the movable segments of the pick ring.

Regarding claims 8 and 14, wherein the spring system is provided with at least one spring ring engaging at least one of the movable segments. The spring system includes a spring ring (51) that engages the plurality of movable segments.

***Allowable Subject Matter***

7. Claims 15-17 and 19 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

8. Applicant's arguments filed December 6, 2006 have been considered but are moot in view of the new ground(s) of rejection.

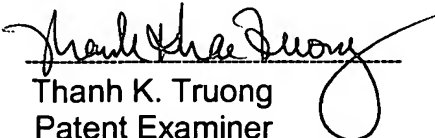
**Conclusion**

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh K. Truong whose telephone number is 571-272-4472. The examiner can normally be reached on Mon-Thru 8:00AM - 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Thanh K. Truong  
Patent Examiner  
February 15, 2007.





APPROVE

